AMENDMENTS TO THE CLAIMS

Please cancel claim 4 without prejudice or disclaimer to the subject matter described therein. Please amend claims 1, 2, 14, and 18 as indicated below.

1. (Currently amended) Method for screening for a ~~of~~ modulator ~~modulators~~ of calcineurin enzymatic activity, characterized in that a direct ~~an~~ interaction between calcineurin and superoxide dismutase is monitored, comprising the following steps

- formation of a complex comprising at least calcineurin and superoxide dismutase in the presence of at least one potential modulator,
- detecting the influence of the potential modulator by directly monitoring the complex formation ~~and/or by monitoring the enzymatic activity~~.

2. (Currently amended) Method according to claim 1, characterized in that the ~~the~~ superoxide dismutase is a Copper/Zinc-superoxide dismutase.

3. (Previously presented) Method according to claim 1, characterized in that formation of the complex is performed in the presence of the potential modulator.

4. (Canceled)

5. (Previously presented) Method according to claim 1, characterized in that the monitoring is performed by detection of labels.

6. (Previously presented) Method according to claim 1, characterized in that the calcineurin and/or the superoxide dismutase carry labels, wherein the labels are enhanced green fluorescent protein.

7. (Previously presented) Method according to claim 6, characterized in that calcineurin and/or superoxide dismutase are expressed as fluorescent proteins.

8. (Previously presented) Method according to claim 1, characterized in that the monitoring of complex formation is performed by laser fluctuation correlation spectroscopy.

9. (Previously presented) Method according to claim 1, characterized in that calcineurin and superoxide dismutase are coexpressed in cells, and that the complex formation is performed within the cell.

10. (Previously presented) Method according to claim 1, characterized in that calcineurin and/or superoxide dismutase are expressed in cells, and that calcineurin and/or superoxide dismutase are isolated and/or purified before the complex formation is performed.

11. (Previously presented) Method according to claim 10, characterized in that purification of calcineurin is achieved by ferro-nitrilotriacetat(NTA)-metal affinity chromatography.

12. (Previously presented) Method according to claim 10, characterized in that purification of superoxide dismutase is achieved by copper/zinc-NTA-metal affinity chromatography.

13. (Previously presented) Method according to claim 1, characterized in that in the complex formation step, calmodulin and/or calcium are present.

14. (Currently amended) Method according to claim 1, characterized in that additionally a ~~the~~ monitoring of the enzymatic activity is performed by analyzing the phosphatase activity of calcineurin.

15. (Previously presented) Method according to claim 14, characterized in that the phosphatase activity is analyzed by the use of at least one substrate, which preferably carries a label.

16. (Previously presented) Method according to claim 15, characterized in that the substrate is a peptide characterized by the amino acid sequence

Asp - Leu - Asp - Val - Pro - Ile - Pro - Gly - Arg - Phe - Asp - Arg - Arg - Val - Ser - Val - Ala - Ala - Glu.

17. (Previously presented) Method according to claim 15, characterized in that the substrate is a peptide containing a residue labeled with fluorescein.

18. (Currently amended) Method according to claim 3, characterized in that the influence of the potential modulator on the <u>enzymatic</u> ~~complex~~ activity is detected separately from the influence of the potential modulator on the complex formation ~~and or/complex activity~~.

19. (Previously presented)) Method for screening of modulators of calcineurin activity, comprising:

a) determining the interaction of a potential modulator with either calcineurin or superoxide dismutase as a partner,

b) taking a potential modulator showing interaction with calcineurin or superoxide dismutase according to step a),

c) determining the interaction of said modulator taken in step b), with the other partner, namely calcineurin or superoxide dismutase, respectively, and

d) identifying the potential modulator showing interaction also according to step c).

20. (Previously presented) Method according to claim 19, characterized in that calcineurin and/or superoxide dismutase comprises at least one tag.

21. (Previously presented) Method according to claim 19, characterized in that said superoxide dismutase is a Copper/Zinc-superoxide dismutase.

22. (Previously presented) Method according to claim 19, characterized in that calcineurin and/or superoxide dismutase is attached to a solid matrix.

23. (Withdrawn) Kit for screening of modulators of calcineurin activity comprising

- calcineurin and/or a vector encoding for calcineurin and/or cells capable of expressing calcineurin, and
- superoxide dismutase and/or a vector encoding for superoxide dismutase and/or cells capable of expressing superoxide dismutase.